

# **EXHIBIT 4**

**UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Civil Action No. 1:19-cv-12551-FDS

**NOTICE OF DEPOSITION OF GOOGLE LLC**  
**PURSUANT TO FED. R. CIV. P. 30(B)(6)**

PLEASE TAKE NOTICE that Plaintiff depose, by oral questions, Defendant, pursuant to Fed. R. Civ. P. 26 and Fed. R. Civ. P. 30(b)(6), regarding the matters identified in the attached Schedule A.

The deposition will occur remotely by videoconference, commencing at 9:00 am PST on March 22, 2020, via remote videoconference. The deposition will be taken through Esquire Deposition Solutions' WebEx and Agile Law remote deposition software before a notary public or other officer duly authorized to administer oaths and take testimony, and will be videotaped and recorded by stenographic means.

Prior to the deposition, Defendant shall designate in writing to Plaintiff the name(s) of the person(s) who will testify on its behalf in response to this Notice.

Dated: March 10, 2021

By: /s/ Paul J. Hayes  
Paul J. Hayes (BBO #227000)  
Matthew D. Vella (BBO #660171)  
Kevin Gannon (BBO #640931)  
Daniel J. McGonagle (BBO #690084)  
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ATTORNEYS FOR THE PLAINTIFF

**CERTIFICATE OF SERVICE**

I certify that on March 10, 2021, I served this document on Defendant by sending a copy via email to Defendant's counsel of record.

/s/ Paul J. Hayes

**SCHEDULE A**

**DEFINITIONS AND INSTRUCTIONS**

The following definitions and instructions shall apply to each of the following topics of examination.

1. “Google,” “you” “Defendant” or “your” means Google, LLC, its employees, officers, directors, attorneys, and its agents, parents, subsidiaries, branches, predecessors, or successors-in-interest, or any other persons who have acted or purported to act for its behalf.

2. “Plaintiff” or “Singular” means Singular Computing LLC.

3. “Accused Products” means all products, computer systems, devices, and other hardware/software identified in Plaintiff’s Amended Complaint (Dkt. 37) and in Plaintiff’s Infringement Contentions, including without limitation at least:

- i. Google Cloud Tensor Processing Unit Version 2 (“TPU v.2”);
- ii. Google Cloud Tensor Processing Unit Version 3 (“TPU v.3”);
- iii. Software that runs workloads on TPU v.2 or TPU v. 3 including TensorFlow; and
- iv. Larger compute systems that incorporate (i), (ii) and/or (iii) such as TPU Pods.

4. “Accused Services” means all Google services delivered in whole or in part by use of any Accused Product, including Translate, Photos, Search, Assistant, Gmail and Cloud (including Cloud AI and Cloud TPU).

**MATTERS FOR EXAMINATION**

The deponent(s) shall be prepared to address the following topics:

1. Google's decision to develop, build, and implement in its data centers the Accused Products.
2. Capital asset requests and analyses associated with developing Google's data centers without the Accused Products.
3. Google's long-term capital investment plans relating to its data centers.
4. Projections of Google's long-term data center needs and shortfalls.
5. Capital asset requests and analyses associated with developing Google's data centers with the Accused Products.
6. Studies performed either internally by Google or by third parties discussing system architecture for Google data centers with or without the Accused Products.
7. Internal studies by Google or third parties discussing the benefits of using the Accused Products as opposed to other products, computer systems, devices, and other hardware/software having architectures that differ from those used by the Accused Products.
8. Google's decision to invest in designing and making the Google Tensor Processing Unit v.1 ("TPU v.1") in-house, including business analyses, capital asset requests, research and development expenditure requests, research and development reports and presentations related to the development of the TPU v.1, and presentations to management and/or Google's board to support the decision to implement the TPU v.1.
9. Google's decision to invest in designing and making the TPU v.2 and TPU v.3 in-house, including business analyses, capital asset requests, research and development expenditure requests, research and development reports and presentations related to the development of the Accused Products, and presentations to management and/or Google's board to support the decision to implement the Accused Products.
10. As of 2017, the average cost to build a data center.
11. As of 2017, the average cost to maintain a data center.
12. As of 2017, Google's corporate return on investment (ROI) policy.